

## Industrial Waterproof Touch Screen Display

### ADM-5800AX Series



## USER MANUAL

*Thank you for purchasing our ADM-5800AX Series Industrial Waterproof LCD Display. We are confident that you will be pleased with the performance and reliability of your new display. This display is designed to be operated in harsh environments and meet the screen performance requirements of today's demanding industrial applications. While complying with a wide variety of industrial video formats, it delivers a larger screen area, higher resolutions, and greater color accuracy than many displays in its price range.*

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# **Product safety precautions**

Read all of these instructions and save this manual for later use. Follow all warnings and instructions on the product.

- Relative humidity: 25%~80%
- Storage temperature: -20°C to 60°C(-4F to 140F)
- Operation temperature: 0~50°C(32F to 122F)
- Unplug the unit when not in use for an extended period of time.
- Consult a service technician if the display does not operate normally when you have followed the instructions in this manual.
- Do not attempt to repair this product yourself. Always get a qualified service technician to carry out adjustments or repairs.
- Do not place heavy objects on the unit.
- Use only the power cord supplied with the unit. In the event that another power cord is used, one that is different than the one provided by the supplier, make sure that it is certified by the local and applicable national standards.
- If the power cable is faulty in any way, please contact the manufacturer or the nearest authorized repair service provider for a replacement.
- The power supply cord is used as the main disconnect device. Ensure that the socket outlet is easily accessible after installation.
- Overloaded AC outlets, extension cords, frayed power cords, and broken plugs are extremely dangerous. They may, and can, result in an electrical shock or fire hazard. Call an authorized service technician for any replacements.
- Hands must be dry when plugging the power cord into an AC outlet to prevent electrical shock. Do not damage the power cord by disassembling, bending, pulling or exposing it to heat as it may cause a fire or electrical shock.
- Make sure to completely insert the power plug into an AC outlet. Insecure connections can cause a fire.
- Unplug the display if cleaning is needed. The screen may be wiped with a dry or slightly damp cloth when the power is off.

***Important: Read all the contents of this instruction manual carefully before you first use the ADM-5800AX Series industrial waterproof display.***

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# **Chapter 1 Welcome**

## **Introduction**

Arista Corporation's 15", 17", 19" industrial waterproof LCD displays are designed to operate in harsh environments, and are ideally suited for a wide variety of industrial environments, applications and outdoor use.

The industrial waterproof LCD display consists of a display and a smart Local Host Transmitter.

The high resolution display is capable of displaying large amounts of critical production and process information, and provides floor personnel with easy-to-see and easy-to-read production targets, cadence, alarms, machine uptime and downtime measurements, and OEE (overall equipment effectiveness), thus helping to improve productivity and efficiency in the work place.

With just one cost-effective RJ45 LAN cable, the Local Host Transmitter lets you extend video signals that cover distances of up to 330m (1,000ft). The Local Host Transmitter is situated near the signal source, and the ADM-5800AX series display can be placed in your preferred location. With built-in EQ and GAIN control, the transmission path can be adjusted to adapt to the cable quality and video bandwidth to attain desired video quality. Due to loss from long distance transmissions, the VGA RGB delay control (de-skew) function provides compensation for R, G, B color channel signals over a normal LAN cable. In order to give the user more control, the Local Host Transmitter also has a built-in RS-232 half-duplex long range extender that extends its signal simultaneously with the VGA video signal.

# Features

## For the display

- 15", 17", 19" industrial waterproof display, 1024 x 768 (15")/1280 x 1024(17",19") resolution
- 4:3 aspect ratio for the display with touch support.
- LCD protected by tempered glass.
- High quality, waterproof stainless steel bezel
- Computer video signals of VGA, SVGA, XGA, SXGA, WXGA, UXGA, WUXGA standard.
- Supports vertical refresh rates of up to 75Hz for VGA, SVGA and XGA of VESA standard specification.
- True XGA with expansion support from DOS, VGA, SVGA.
- Analog RGB signal direct input offers multiscan function.
- Color supports up to 8 bits per color, total 16 million colors.
- Strengthened protective glass(anti-reflective optional).
- Sunlight readable option
- High brightness,contrast and wide viewing angles
- Single control operation and transparent On-Screen-Display (OSD) user interface. Full control of all relevant display and interface parameters via OSD.
- Meets IP-67 requirements.

## For the Local Host Transmitter

- Transmission distances of up to 330m/1000 feet
- Provides a VGA interface on the transmitter for local use
- Supports local and remote VGA monitors.
- Can extend signals using a simple RJ45 LAN cable.
- Supports simultaneous video and audio extension
- No software is required, easy installation, and supports plug-and-play.
- Perfect image quality, strong anti-interference performance, image clarity and brightness are adjustable
- Supports RS-232 half-duplex
- Adjustable equalization on remote display
- Adjustable gain control on remote display
- De-skew compensation available for RGB delay control
- Wall mountable case for better stability
- Supports PC, SUN, MAC or ELINX switch with VGA video.
- Multi-platform support: Windows 2000/XP/Vista/Server 2000/2003/2008, Solaris, Linux, FreeBSD, and MAC OS 9/10.
- Built-in lightning and surge protection.
- Super interference rejection

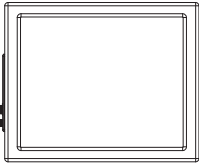
# Product specifications

Specifications	ADM-5815 AX	ADM-5817 AX	ADM-5819 AX
<b>LCD Display</b>			
Display Size (Diagonal)	15 inch	17 inch	19 inch
Resolution	1024 x 768	1280 x 1024	1280 x 1024
Backlight Lifetime (Hours)	50,000	50,000	50,000
<b>Visual Characteristics</b>			
Colors	16 Million	16 Million	16 Million
Aspect ratio	4:3	4:3	4:3
Viewing angle (V/H)	120° / 130°	140° / 140°	178° / 178°
Response time(Typical)	12 ms	12 ms	20 ms
Pixel Pitch(mm)	0.297 x 0.297	0.264 x 0.264	0.294 x 0.294
Contrast ratio	500:1	800:1	700:1
Brightness	400 nits	300 nits	300 nits
<b>Touch Screen</b>			
Technology	5 Wire Resistive	5 Wire Resistive	5 Wire Resistive
Touch rating	35 Million Touches	35 Million Touches	35 Million Touches
MTBF	490,000 hours	490,000 hours	490,000 hours
Interface	RS-232	RS-232	RS-232
Platform	WinXP Pro, Win XPe, Win 7	WinXP Pro, Win XPe, Win 7	WinXP Pro, Win XPe, Win 7
<b>Receiver</b>			
Video bandwidth	350MHz	350MHz	350MHz
Video support	VESA	VESA	VESA
Equalization	Continuous analog control	Continuous analog control	Continuous analog control
RGB delay control	Yes	Yes	Yes
ESD protection	<b>Core chipset -- +8kV</b>	<b>Core chipset -- +8kV</b>	<b>Core chipset -- +8kV</b>
Input	1 x RJ45	1 x RJ45	1 x RJ45
<b>Power/Thermal Specs.</b>			
Power Requirement ( Max )	110VAC @ 0.3A, 220V AC @ 0.15A 24VDC @ 1.25A Max	110VAC @ 0.4A, 220V AC @ 0.2A 24VDC@ 1.6A	110VAC @ 0.45A, 220V AC @ 0.25A 24VDC@ 1.9A
Power Consumption ( Max )	30W	38W	45W
Heat Dissipation	102 BTU/hr	129 BTU/hr	153 BTU/hr
<b>Physical Information</b>			
Mounting	Multiple Options	Multiple Options	Multiple Options
Net Weight	27 Lbs / 12.24 Kg	29 Lbs / 13.15 Kg	32 Lbs / 14.51 Kg
Physical Dimension (WxHxD)	14.51 x 12.42 x 4.09 inch 368.6 x 315.5 x 103.9 mm	15.88 x 14.07 x 4.36 inch 403.4 x 357.4 x 110.7 mm	17.8 x 15.19 x 4.4 inch 452.1 x 385.8 x 111.8 mm
<b>Environmental</b>			
Operating Temperature	0° - 50° C (32° - 122° F)	0° - 50° C (32° - 122° F)	0° - 50° C (32° - 122° F)
Storage Temperature	-20° - 60° C (-4° - 140° F)	-20° - 60° C (-4° - 140° F)	-20° - 60° C (-4° - 140° F)
Relative Humidity	5% - 95% (non-condensing)	5% - 95% (non-condensing)	5% - 95% (non-condensing)
Rating	NEMA 4X	NEMA 4X	NEMA 4X
Certification	N/A	N/A	N/A

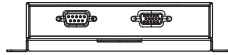
Specifications	Local Host transmitter
Technical Information	
Video bandwidth	350MHz
Transmission	WUXGA — 330m (1,000ft) [CAT5e]
Audio support	No
RS-232 signal type	Half-duplex & baud rate
Input video signal	1.2 Volts [peak-to-peak]
Equalization	Continuous analog control
RGB delay control	Yes
Loop-out	1 VGA loop-out at TX
ESD protection	[1] Human body model — ±15kV [air-gap discharge] & ±8kV [contact discharge] [2] Core chipset — ±8kV
PCB stack-up	4-layer board [impedance control — differential 100Ω; single 50Ω]
Input	1x VGA, 1x RS-232
Output	1x RJ45, 1x VGA
VGA connector	HD-15 [15-pin D-sub female]
RJ45 connector	WE/SS 8P8C with 2 LED indicators
RS-232 connector	DE-9 [9-pin D-sub female]
Physical Information	
Mounting	Wall mounting, Din-Rail mounting
Net Weight	0.530kg
Physical Dimension	6.19 X 4.04 X 1.35 inch/ 157 X 103 x 34 mm (L X W X H)
Mechanical Information	
Mounting	Wall mounting or DIN-RAIL mounting
Power supply	5V/2A DC(Max.)
Power consumption	5 Watts [max]
Operation temperature	0~50°C [32~122F]
Storage temperature	-20~60°C [-4~140F]
Relative humidity	20~90% RH [no condensation]

# Unpacking

Open the package and inspect the items carefully to make sure no item is damaged and all items listed are present in your package.



ADM-5800AX Series display x1



Local Host Transmitter x1



6 feet VGA cable x1



6 feet RS-232 cable x1



Waterproof RJ45 Cable x1



DIN-Rail AC/DC power supply x1  
(for the ADM-5800AX Series display)



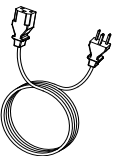
AC power cable x1(for the  
ADM-5800AX Series display)



DC power cable x1(for the  
ADM-5800AX Series display)



AC/DC power adapter x1  
(for the Local Host Transmitter)



AC power cable x1  
(for the Local Host Transmitter)



Driver CD Rom x1

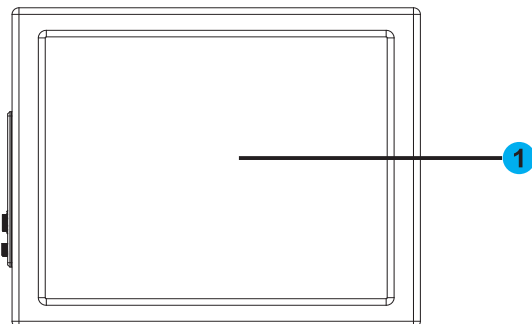


# Chapter 2 Basics

## Product Overview

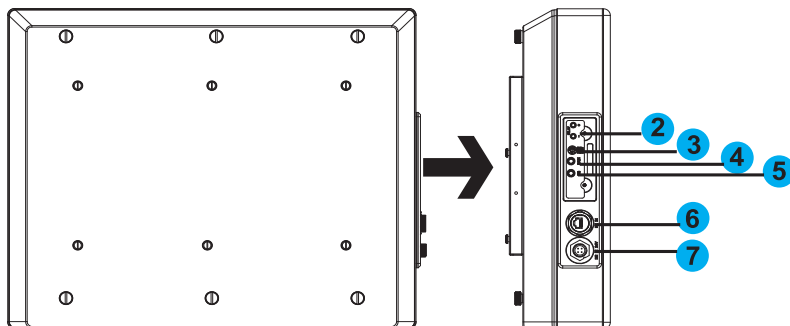
### Display

Front View



Side View

Rear View



**1** Display screen

**2** Decrease or increase the level of de-skew compensation or RGB delay control

**3** De-skew compensation control knob:

0,2,4((0-Blue, 2-Green, 4-Red): De-skew compensation for delay of respective RGB color channel

1, 3, 5(1-Blue, 3-Green, 5-Red): De-skew compensation for equalization of respective RGB color channel

7: De-skew compensation for Gain.

**4** GAIN knob - Rotary control for gain

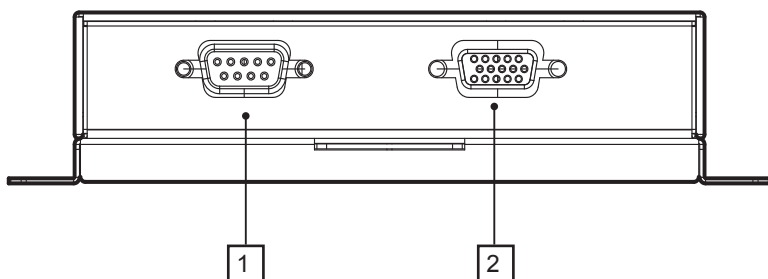
**5** EQ knob-Rotary control for equalization of R, G, B color channel

**6** TX RJ45 LAN port - for touch screen and video-in

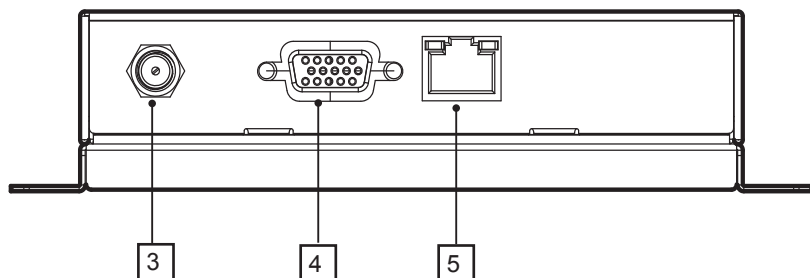
**7** DC 24V input

## Local Host Transmitter

Front View



Rear View



No.	Connection	Description
1	RS-232 IN	RS-232 signal source input(for touch screen use)
2	VGA IN	VGA signal source input
3	DC IN	5V/2A DC input
4	VGA OUT	Local host VGA signal output(connect to display monitor-optional)
5	LOCAL OUT	Transmitting signal flow(connect to ADM-5800AX Series waterproof display via RJ45 LAN cable)

## Configuration

There is a label located on the back of the unit that shows the unit's serial number and configuration. The serial number is unique to the unit, and the configuration indicates the options the unit were built with.

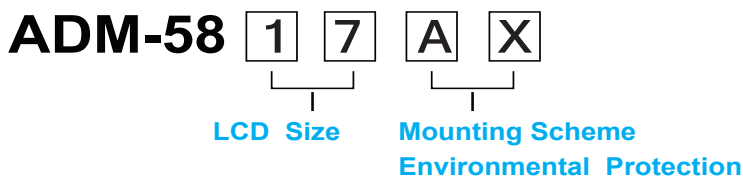
The configuration is given in two parts: the model number and the order information.

### Model number

The model number can be parsed as followed:

For more detailed technical information, including configuration layout, please contact Arista customer support at (510) 226-1800, ext. 400

### Example



### Order information

The ordering information for each configuration is defined below.

	ADM-5815AX-004	ADM-5815AX-005	ADM-5815AX-Z04	ADM-5815AX-Z05
<b>LCD Display</b>	15" Screen	15" Screen	15" Screen	15" Screen
<b>Touch Screen</b>	5-Wire Resistive	5-Wire Resistive	No Touch	No Touch
<b>Bezel</b>	Stainless steel	Stainless steel	Stainless steel	Stainless steel
<b>Power Supply</b>	24VDC Input	110/220VAC Input	24VDC Input	110/220VAC Input
	ADM-5815AX-004-VHB	ADM-5815AX-005-VHB	ADM-5815AX-Z04-VHB	ADM-5815AX-Z05-VHB
<b>LCD Display</b>	15" VHB Wide Screen	15" VHB Wide Screen	15" VHB Wide Screen	15" VHB Wide Screen
<b>Touch Screen</b>	5-Wire Resistive	5-Wire Resistive	No Touch	No Touch
<b>Bezel</b>	Stainless steel	Stainless steel	Stainless steel	Stainless steel
<b>Power Supply</b>	24VDC Input	110/220VAC Input	24VDC Input	110/220VAC Input

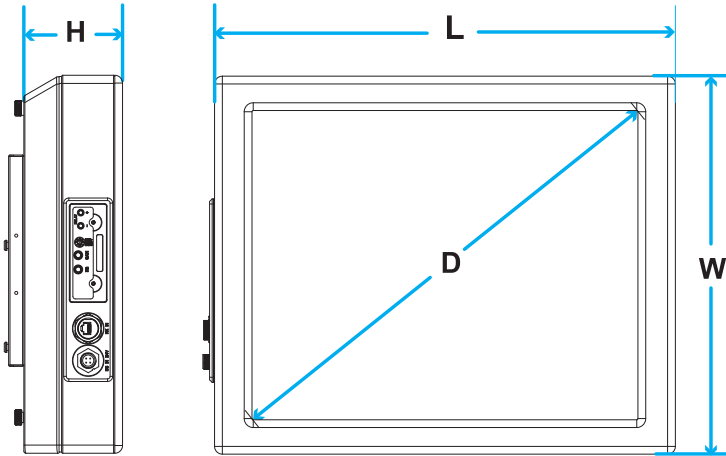
	<b>ADM-5817AX-004</b>	<b>ADM-5817AX-005</b>	<b>ADM-5817AX-Z04</b>	<b>ADM-5817AX-Z05</b>
<b>LCD Display</b>	17" Screen	17" Screen	17" Screen	17" Screen
<b>Touch Screen</b>	5-Wire Resistive	5-Wire Resistive	No Touch	No Touch
<b>Bezel</b>	Stainless steel	Stainless steel	Stainless steel	Stainless steel
<b>Power Supply</b>	24VDC Input	110/220VAC Input	24VDC Input	110/220VAC Input
	<b>ADM-5817AX-004-VHB</b>	<b>ADM-5817AX-005-VHB</b>	<b>ADM-5817AX-Z04-VHB</b>	<b>ADM-5817AX-Z05-VHB</b>
<b>LCD Display</b>	17" VHB Wide Screen	17" VHB Wide Screen	17" VHB Wide Screen	17" VHB Wide Screen
<b>Touch Screen</b>	5-Wire Resistive	5-Wire Resistive	No Touch	No Touch
<b>Bezel</b>	Stainless steel	Stainless steel	Stainless steel	Stainless steel
<b>Power Supply</b>	24VDC Input	110/220VAC Input	24VDC Input	110/220VAC Input

	<b>ADM-5819AX-004</b>	<b>ADM-5819AX-005</b>	<b>ADM-5819AX-Z04</b>	<b>ADM-5819AX-Z05</b>
<b>LCD Display</b>	19" Screen	19" Screen	19" Screen	19" Screen
<b>Touch Screen</b>	5-Wire Resistive	5-Wire Resistive	No Touch	No Touch
<b>Bezel</b>	Stainless steel	Stainless steel	Stainless steel	Stainless steel
<b>Power Supply</b>	24VDC Input	110/220VAC Input	24VDC Input	110/220VAC Input
	<b>ADM-5819AX-004-VHB</b>	<b>ADM-5819AX-005-VHB</b>	<b>ADM-5819AX-Z04-VHB</b>	<b>ADM-5819AX-Z05-VHB</b>
<b>LCD Display</b>	19" VHB Wide Screen	19" VHB Wide Screen	19" VHB Wide Screen	19" VHB Wide Screen
<b>Touch Screen</b>	5-Wire Resistive	5-Wire Resistive	No Touch	No Touch
<b>Bezel</b>	Stainless steel	Stainless steel	Stainless steel	Stainless steel
<b>Power Supply</b>	24VDC Input	110/220VAC Input	24VDC Input	110/220VAC Input

## Physical dimension

The diagrams below show the physical and specific dimensions of the ADM-5800AX Series display and Local Host Transmitter.

### Display

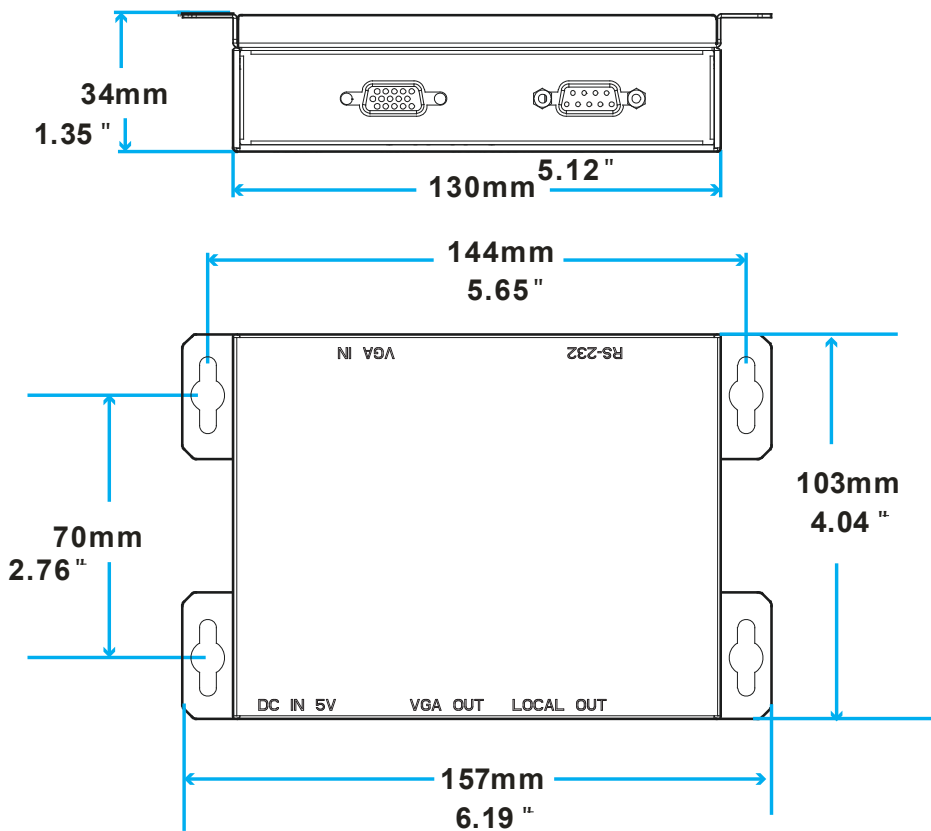


- \* **L:** Overall length
- \* **w:** Overall width

- \* **H:** Overall height
- \* **D:** Overall diagonal length

Model Number	L	W	H	D	Weight
ADM-5815AX	14.5"/368.6mm	12.4"/315.5mm	4.1"/103.9mm	15"/381.0mm	27 Lbs/12.24 Kg
ADM-5817AX	15.9"/403.4mm	14.1"/357.4mm	4.36"/110.7mm	17"/431.8mm	29 Lbs/13.15 Kg
ADM-5819AX	17.8"/452.1mm	15.2"/385.8mm	4.4"/111.8mm	19"/482.6mm	32 Lbs/14.51 Kg

# Local Host Transmitter



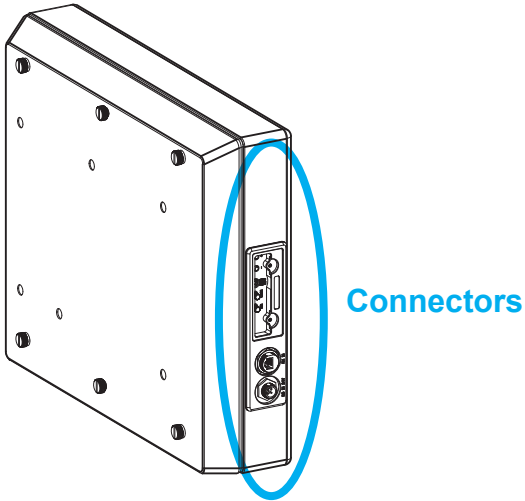
Local Host Transmitter	L(Overall Length)	W(Overall width)	Height	Weight
	6.19"/157mm	4.04"/103 mm	1.35"/34mm	0.530kg

# Chapter 3 Connections

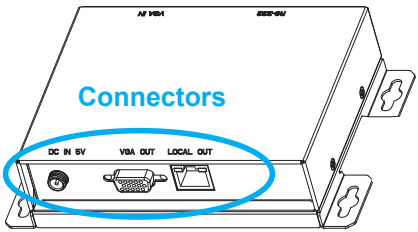
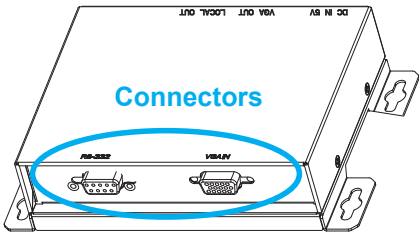
This section describes the connections/connectors available on the ADM-5800AX Series industrial LCD display and the Local Host Transmitter.



Warning! Make sure your display is grounded at all times. Also make sure that it is on the same ground as any other equipment connected to its communications ports.

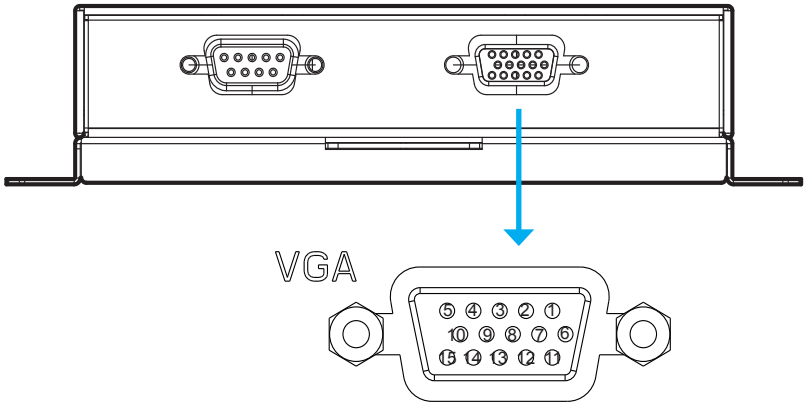


Connectors are located on the side of ADM-5800AX Series display



Connectors are located at the front and rear of the Local Host Transmitter

## Pins in the VGA port

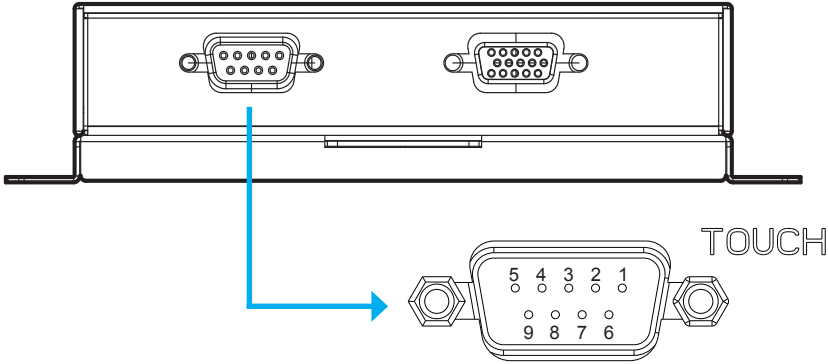


VGA signal input connector

Pin NO.	Pin Assignment	Pin Description	Remark
1	VGA R	VGA Red signal	
2	VGA G	VGA Green signal	
3	VGA B	VGA Blue signal	
4	NC	No connection	
5	GND	Ground	
6	GND	Ground	
7	GND	Ground	
8	GND	Ground	
9	NC	No connection	
10	GND	Ground	
11	NC	No connection	
12	TXD	ISP program upgrade TXD signal serial transmit data	
13	VGA HS	VGA H-Sync signal	
14	VGA VS	VGA V-Sync signal	
15	RXD	ISP program upgrade RXD signal Serial receive data	



## Pins in the RS-232 touch port



RS-232 signal input connector			
Pin NO.	Pin Assignment	Pin Description	Remark
1	NC	No connection	
2	TX	ISP program upgrade TXD signal serial transmit data	
3	RX	ISP program upgrade RXD signal Serial receive data	
4	NC	No connection	
5	GND	Ground	
6	NC	No connection	
7	NC	No connection	
8	NC	No connection	
9	NC	No connection	

# Mounting the Local Host Transmitter

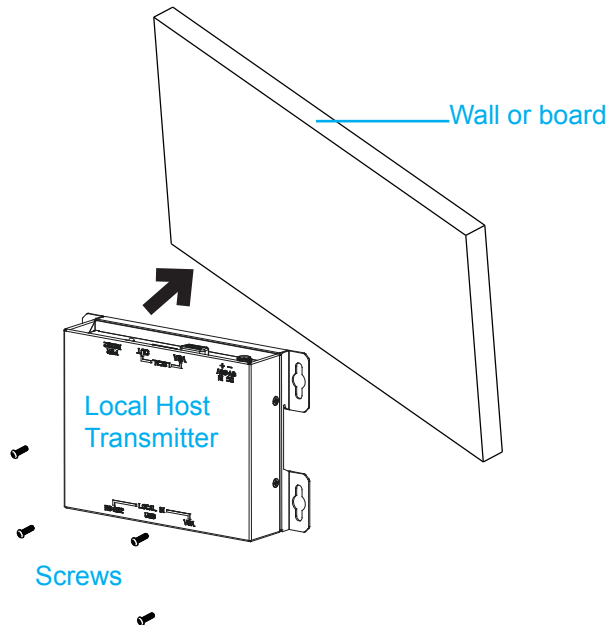
## 1. Wall mounting

There are two methods to mount the Local Host Transmitter: Wall mounting and DIN-rail mounting.

The Local Host Transmitter can be placed on a shelf, table, or mounted onto a control panel. To mount it onto a control panel, you will require the mounting screws found in the accessory box.

**Please follow the steps shown in the diagram below:**

- Situate the Local Host Transmitter on a board or a wall. Firmly secure it by screwing it in with four “#8-32UNC” size screws.
- Make sure that the Local Host Transmitter is correctly and securely seated onto the board or wall.

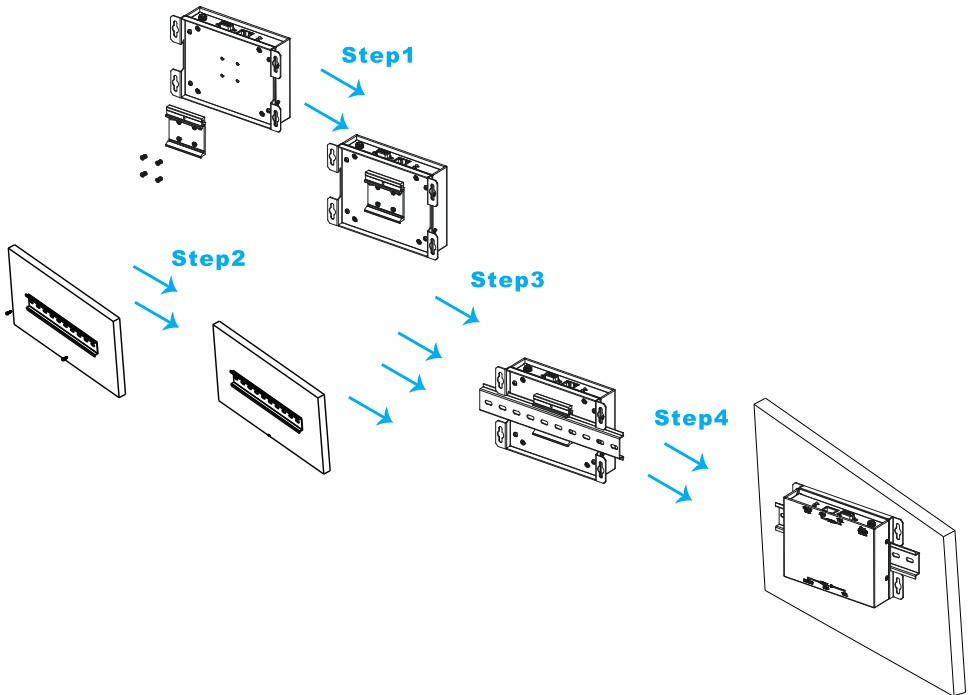


It is very important to place the unit in a suitable environment. Make sure the area is well ventilated, out of direct sunlight, away from sources of excessive dust, dirt, heat, water, moisture and vibration.

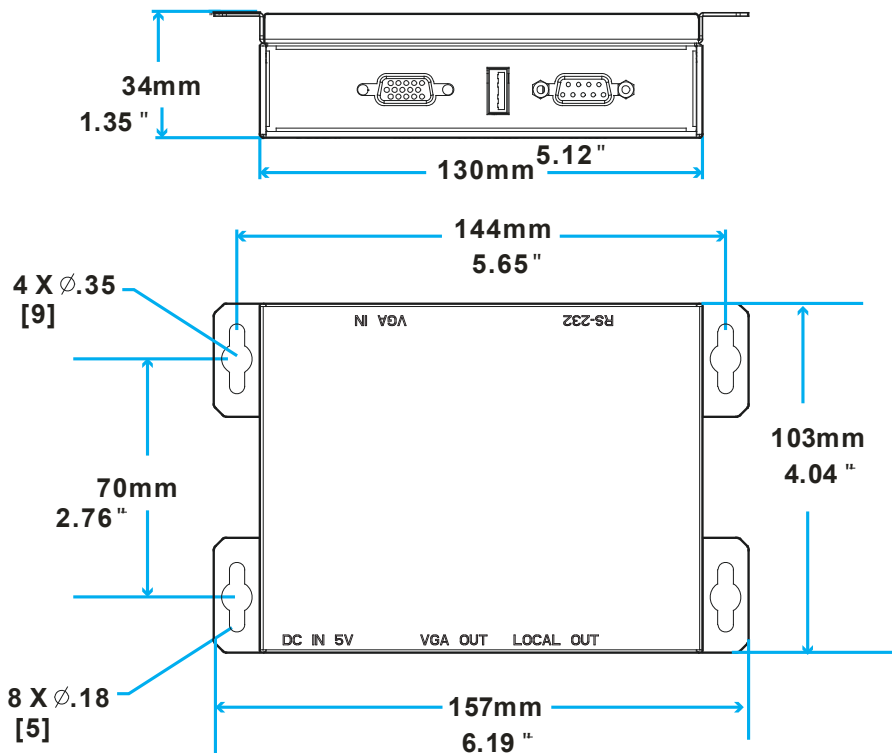
## 2. DIN-Rail mounting

Please follow the steps as shown below to mount the Local Host Transmitter via DIN-Rail.

- **Step 1:** Place the metal clasp on the back of the Local Host Transmitter, and screw it in using “#6-32UNC” sized screws.
- **Step 2:** Place one Din-Rail on the wall or board, and use a screwdriver to tighten the screws to affix the Din-Rail onto the wall or board.
- **Step 3:** Snap the metal clasp onto the Din-rail to mount the Local Host Transmitter onto the wall or board.
- **Step 4:** You can also slide the metal clasp around the Din-rail to move the Local Host Transmitter to a desired position.



In order to correctly install the Local Host Transmitter, the specific dimensions are indicated in the diagram below.



# Mounting the display

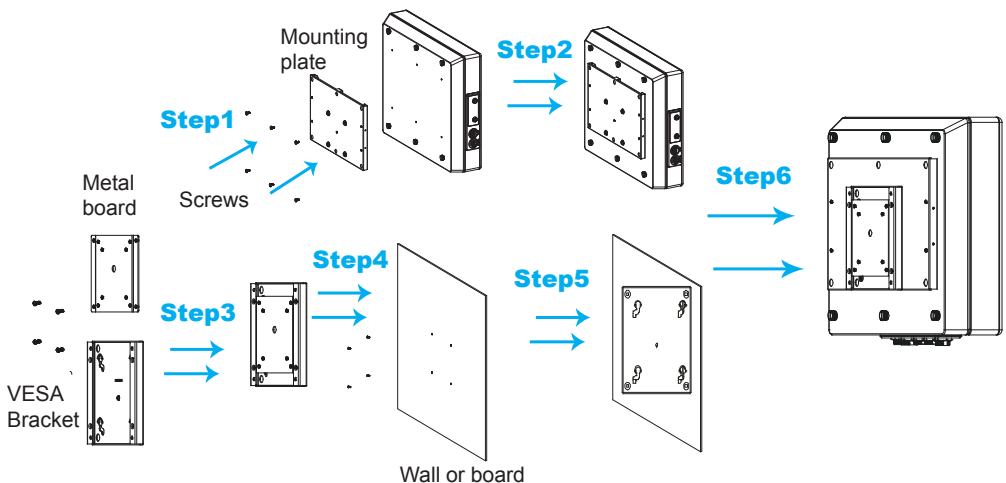
This section outlines how to mount the ADM-5800AX Series display. There are five methods available: VESA Mounting, Wall Mounting, Benchtop Stand Mounting, Pedestal Mounting and Ceiling Mounting. Users may choose any of the five mounting methods to suit their needs.

## 1. VESA Mounting

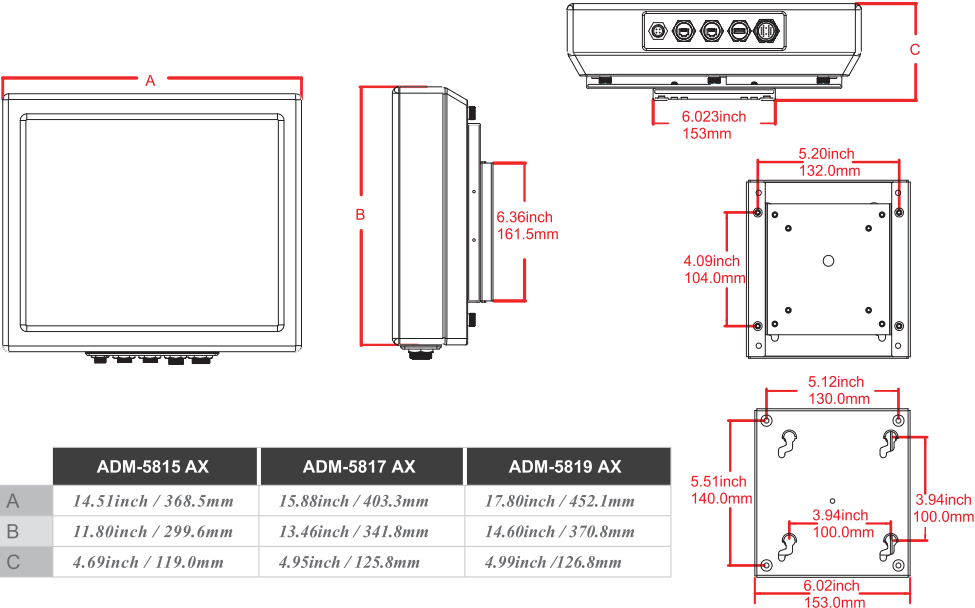
“VESA FDMI Standard” stands for Video Electronics Standards Association Flat Display Mounting Interface Standard. The ADM-5800AX Series waterproof industrial display needs to be mounted on a VESA-compliant arm or bracket. And on the ADM-5800AX Series display, holes have been pre-drilled on the back of it.

**As shown in the figure below, please follow these steps to mount the display.**

- **Step 1:** Place the metal mounting plate on the back of the ADM-5800AX Series display, and align the holes on the mounting plate with the holes on the display.
- **Step 2:** Use a screwdriver to tighten the six “#8-32UNC” sized screws to fix the metal mounting plate on the display.
- **Step 3:** Place the metal board on the VESA bracket, and tightly bolt four screws to the VESA bracket and metal board.
- **Step 4:** Place the VESA bracket with the metal board on the wall or board, and align the holes on the VESA bracket with the holes on the wall or board.
- **Step 5:** Use a screwdriver to tighten the screws to fix the VESA bracket on the wall or board.
- **Step 6:** Mount the display onto the wall or board through the metal mounting plate and VESA bracket. Ensure that the display is properly and securely situated onto the wall or board.



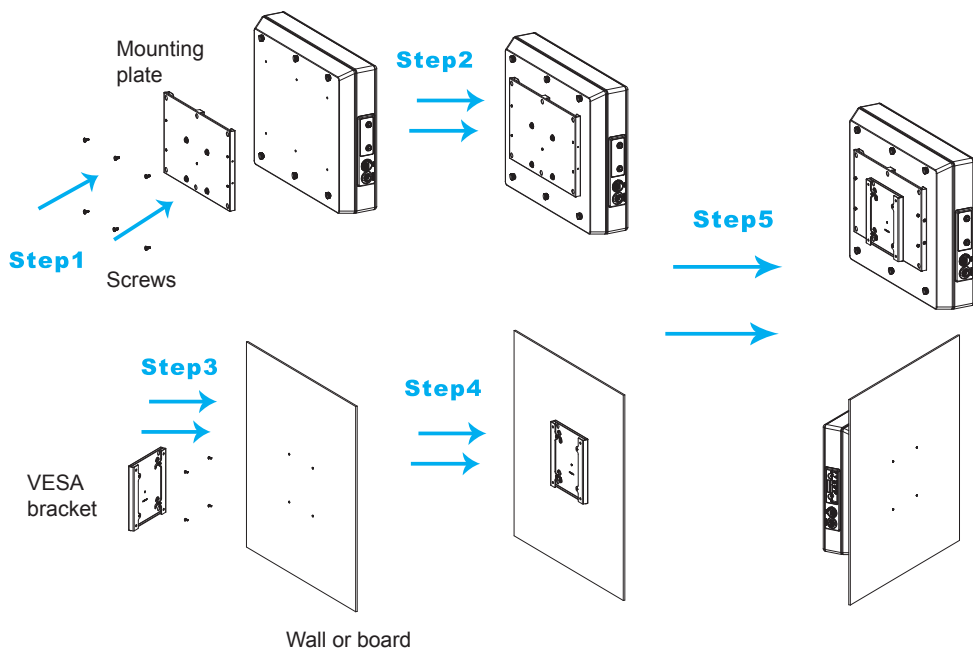
# Physical dimensions for VESA mounting



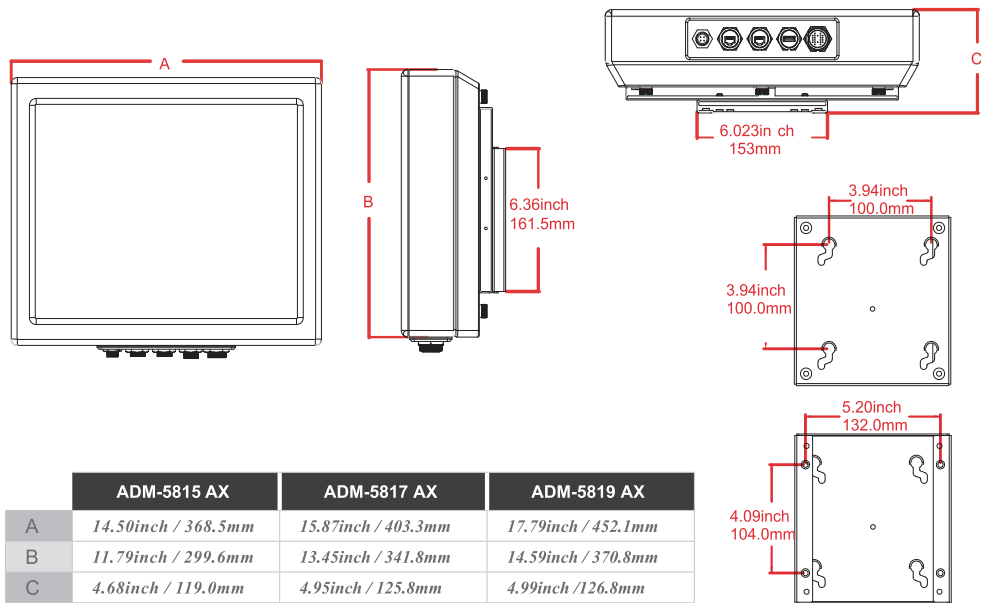
## 2. Wall mounting

As shown in the figure below, please follow these steps to mount the display.

- **Step 1:** Place the metal mounting plate on the back of the ADM-5800AX Series waterproof industrial display, and align the holes on the mounting plate with the holes on the display.
- **Step 2:** Use a screwdriver to tighten the six “#8-32UNC” sized screws to fix the metal mounting plate on the display.
- **Step 3:** Place the VESA bracket on the wall or board, and align the holes on the VESA bracket with the holes on the wall or board.
- **Step 4:** Use a screwdriver to tighten the screws to fix the VESA bracket onto the wall or board.
- **Step 5:** Mount the display onto the wall or board through the mounting plate and VESA bracket. Visually inspect the display to be sure that it is properly and securely situated onto the wall or board.



# Physical dimensions for Wall mounting





### 3. Benchtop stand mounting

The ADM-5800AX Series display can be placed on a table or bench by mounting it onto the metal benchtop stand. To mount it onto the benchtop stand, you will require the mounting screws found in the accessory box.

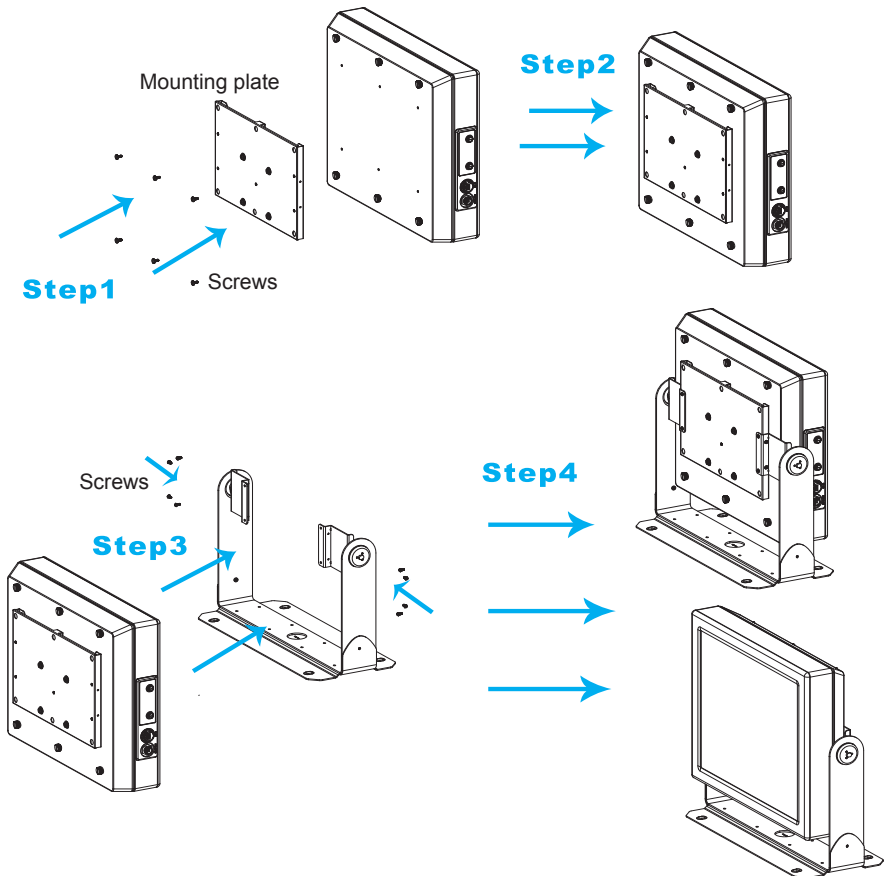
**As shown in the figure below, please follow these steps to mount the display.**

**Step 1:** Place the metal mounting plate on the back of the ADM-5800AX Series waterproof industrial display, and align the holes on the mounting plate with the holes on the display.

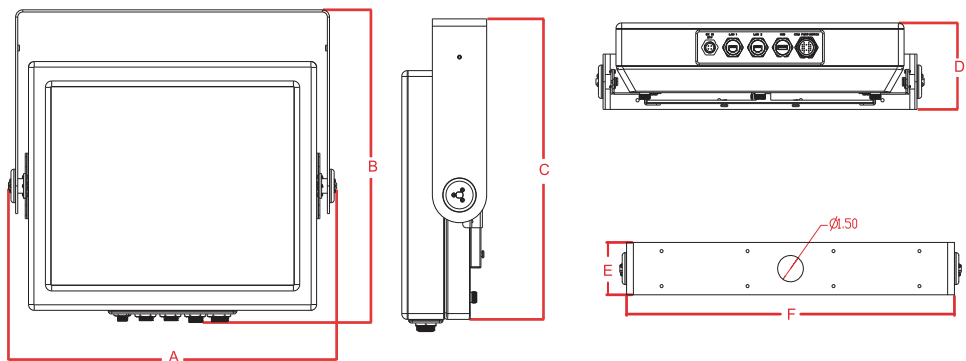
**Step 2:** Use a screwdriver to tighten the six “#8-32UNC” sized screws to fix the metal mounting plate on the display.

**Step 3:** Take the metal benchtop stand, and situate the ADM-5800AX Series display into the benchtop stand. Align the holes on the side of the mounting plate with the holes on the benchtop stand.

**Step4:** Use a screwdriver to bolt the “#8-32UNC” sized screws to the mounting plate and benchtop stand. Make sure the display is firmly secured on the benchtop stand.



# Physical dimensions for Benchtop Stand mounting



	ADM-5815 AX	ADM-5817 AX	ADM-5819 AX
A	16.79 inch / 426.4 mm	18.09 inch / 459.4 mm	19.86 inch / 504.4 mm
B	15.30 inch / 388.6 mm	16.92 inch / 429.7 mm	18.05 inch / 458.5 mm
C	14.64 inch / 371.8 mm	16.26 inch / 412.9 mm	17.39 inch / 441.8 mm
D	4.41 inch / 112.0 mm	4.68 inch / 118.8 mm	4.72 inch / 119.8 mm
E	2.99 inch / 76.0 mm	2.99 inch / 76.0 mm	2.99 inch / 76.0 mm
F	16.00 inch / 406.4 mm	17.30 inch / 439.4 mm	19.07 inch / 484.4 mm

## 4. Pedestal Mounting

The ADM-5800AX Series display can be mounted on the pedestal. In general, the pedestal comes with a removable shaft or bracket, which allows the display to be easily removable and operated depending on the user's needs.

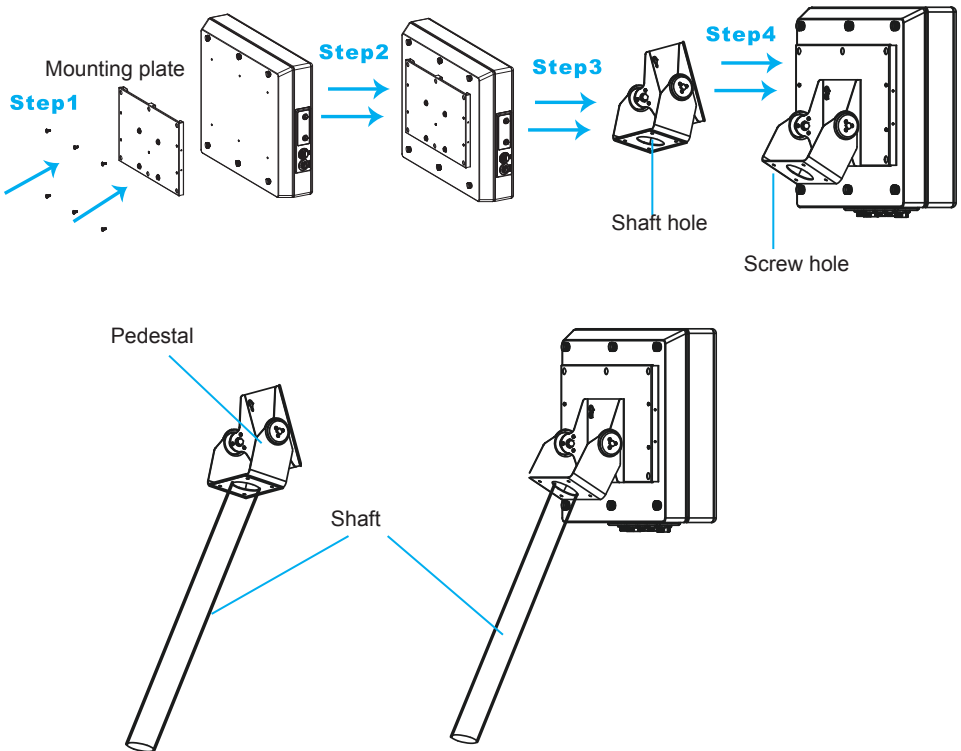
**As shown in the figure below, please follow these steps to mount the display.**

**Step 1:** Place the metal mounting plate on the back of the ADM-5800AX Series industrial display, and align the holes on the mounting plate with the holes on the display.

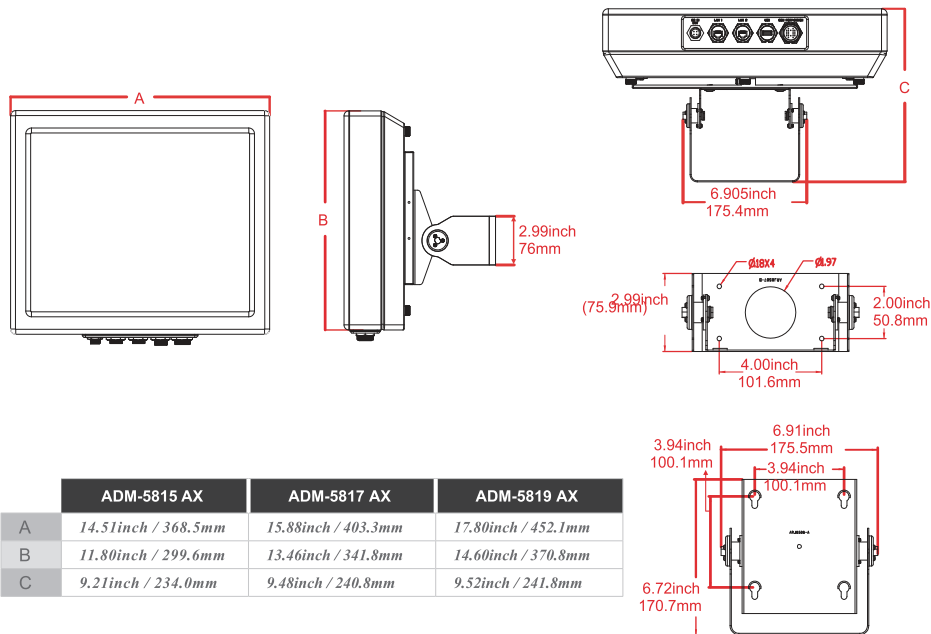
**Step 2:** Use a screwdriver to tighten the six “#8-32UNC” sized screws to fix the metal mounting plate on the display.

**Step 3:** Take the pedestal and fit it on a firmly fixed shaft or bracket through the shaft hole or screw hole. Mount the display onto the pedestal through the mounting plate.

**Step 4:** Make sure the ADM-5800AX Series display is securely and correctly seated onto the pedestal.



# Physical dimension for Pedestal mounting



## 5. Ceiling Mounting

If the need arises, the ADM-5800AX Series waterproof industrial display can be also suspended from the ceiling.

As shown in the figure below, please follow these steps to mount the display.

**Step 1:** Place the metal mounting plate on the back of the ADM-5800AX Series display, and align the holes on the mounting plate with the holes on the display.

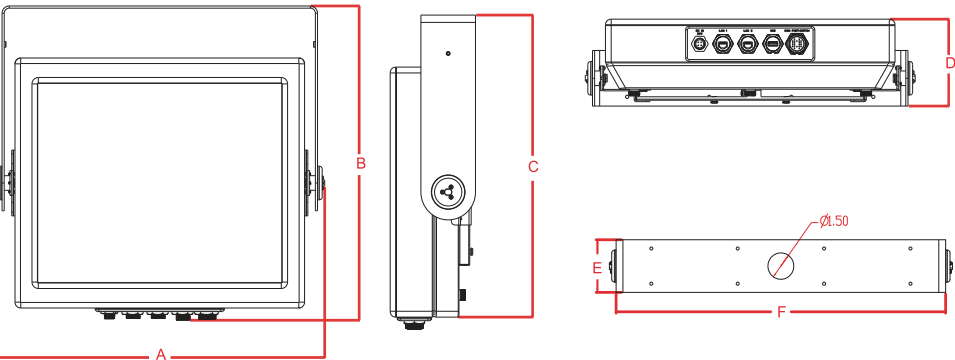
**Step 2:** Use a screwdriver to tighten the six “#8-32UNC” sized screws to fix the metal mounting plate on the display.

**Step 3:** Situate the metal support bracket for ceiling mounting onto the ceiling and bolt the eight screws to it to firmly secure the bracket on the ceiling.

**Step 4:** Take the ADM-5800AX Series display and align the holes on the side of the mounting plate with the holes on the metal support bracket for ceiling mounting.

**Step5:** Use a screwdriver to bolt the “#8-32UNC” sized screws to the mounting plate and metal support bracket. Make sure the display is securely and properly situated onto the metal support bracket.

### Physical dimensions for Ceiling mounting

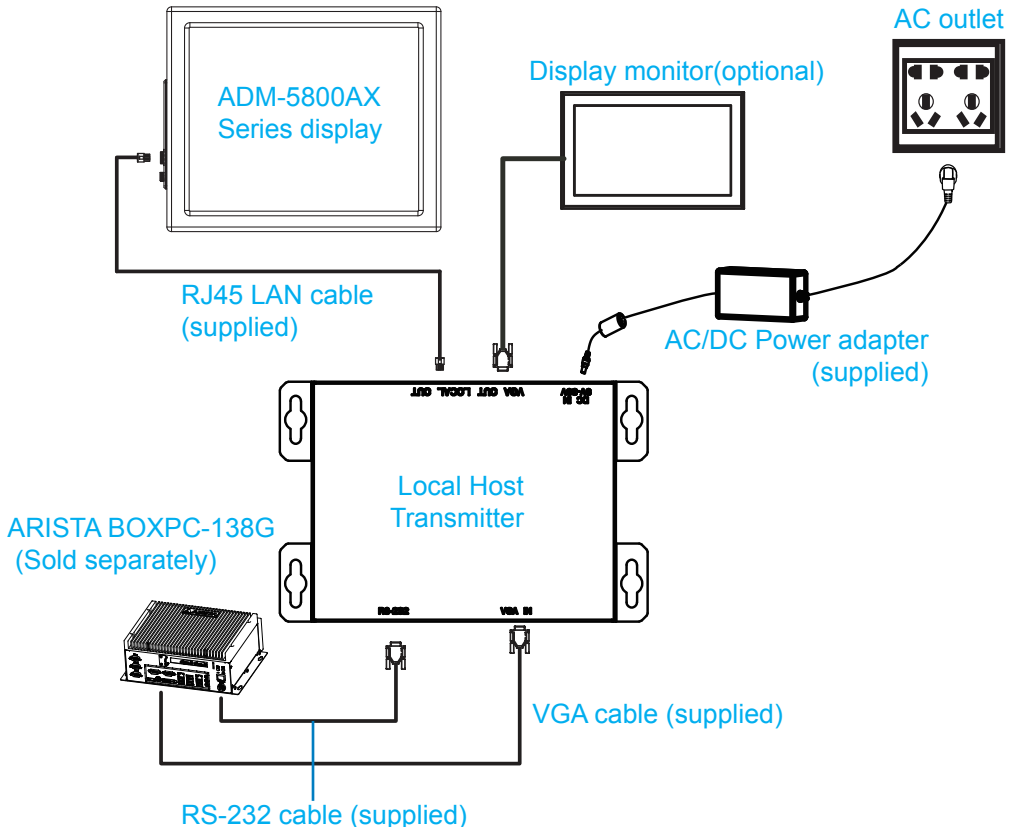


	ADM-5815 AX	ADM-5817 AX	ADM-5819 AX
A	16.79 inch / 426.4 mm	18.09 inch / 459.4 mm	19.86 inch / 504.4 mm
B	15.30 inch / 388.6 mm	16.92 inch / 429.7 mm	18.05 inch / 458.5 mm
C	14.64 inch / 371.8 mm	16.26 inch / 412.9 mm	17.39 inch / 441.8 mm

## Connecting the Local Host Transmitter

Follow the steps below to connect the Local Host Transmitter.

- 1. Connecting to a computer:** Connect one end of the VGA /RS-232 cable to the VGA /RS-232 port of the Local Host Transmitter. Connect the other end of the VGA/RS-232 cable to the VGA-Out/RS232 port of a computer.
- 2. Connecting to the ADM-5800AX Series display:** Connect one end of the RJ45 LAN cable to the RJ45 LAN port of the Local Host Transmitter. Connect the other end of the RJ-45 LAN cable to the TX RJ45 LAN Port of ADM-5800AX Series display.
- 3. Connecting to a Display monitor:** Connect one end of the VGA cable to the VGA port of the Local Host transmitter. Connect the other end of the VGA cable to the display monitor.
- 4. Connecting the power supply:** Connect one end of the AC/DC power adapter to the DC-in connector of the Local Host transmitter. Connect the other end of the AC/DC power adapter to an AC outlet.

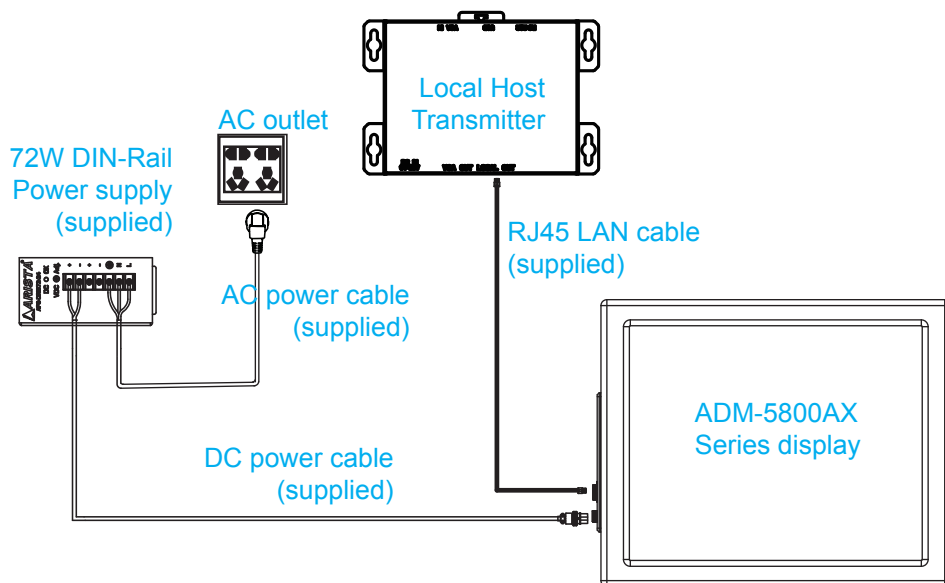


## Connecting the ADM-5800AX Series display

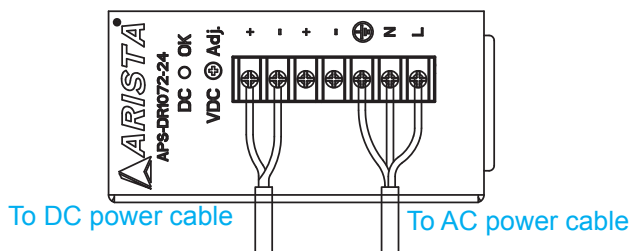
Follow the steps below to connect the ADM-5800AX series display.

**1. Connecting the Local Host Transmitter:** Connect one end of the RJ45 LAN cable to the TX port of the ADM-5800AX series LCD display. Connect the other end of the RJ45 LAN cable to the RJ45 LAN port of the Local Host Transmitter.

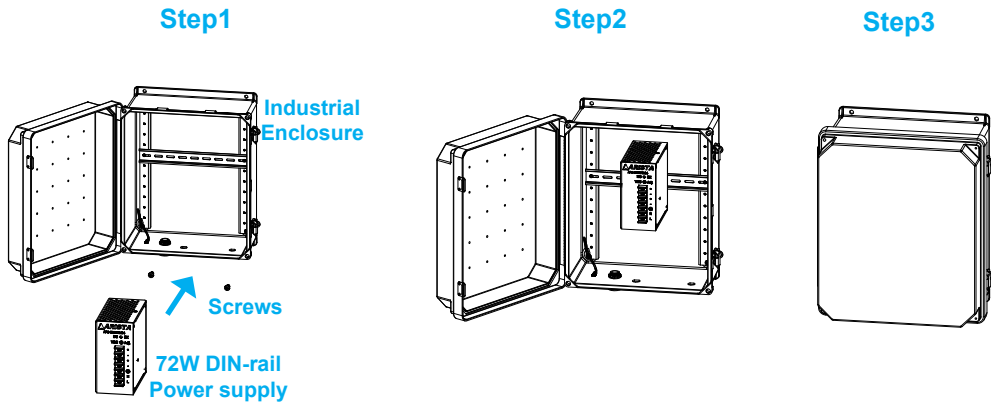
**2. Connecting the power supply:** Connect one end of the 72W DIN-Rail AC/DC power supply to the DC-in(24V) connector of the LCD display. Connect the other end of 72W DIN-Rail AC/DC power supply to an AC outlet.



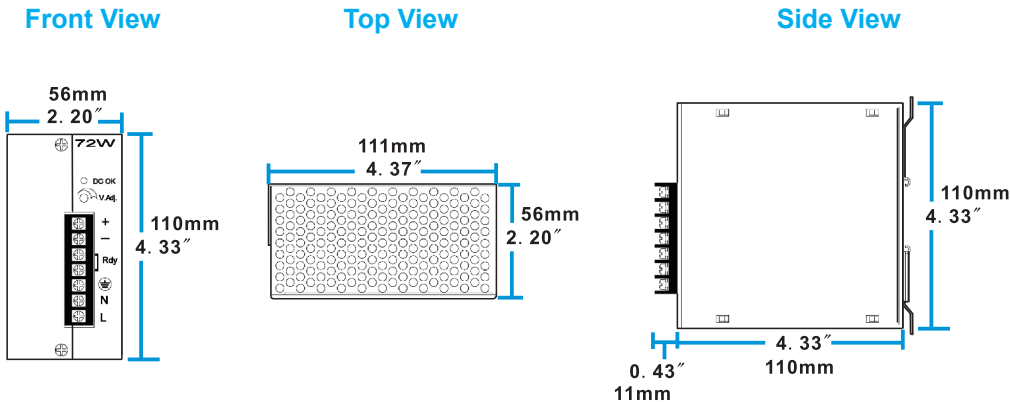
**Important:** Before you use the power supply, please correctly and securely connect the supplied AC power cable to the terminal of "L"(for live wire), "N"(for neutral wire) and "⊕"(Ground) on the power supply, and connect the supplied DC power cable to the "+"(Power) and "-"(Ground) terminals.



The AC to DC 24V power supply provided with the ADM-5800AX Series waterproof display does not have environmental protection. In order to meet a degree of protection, the power supply has to be installed in a specific IP rating enclosure.



In order to correctly install the power supply, the specific dimensions for the power supply are indicated in the diagram below.



- Notes:**
- If, for any reason, the display goes blank and gives an “Out of Range” or “No Input Signal”, your system source is outputting a signal that goes beyond or is incompatible with the LCD’s video A/D board. If this happens, make sure the correct signals are inputted. If the display doesn’t work properly, it may be because:
- The resolution is too high or too low for the LCD.
  - The power supply is incorrect or insufficient.



## Checking connectivity for the ADM-5800AX Series display

### Turning on the ADM-5800AX Series display

- Make sure the Local Host Transmitter connections(see page 30) are done correctly.
- Make sure the display connections(see page 31) are done correctly.
- Then, do the following: 1.Make sure the display is powered on. 2. Make sure the Local Host Transmitter is powered on. 3.Turn your computer or other video devices on.

### Turning off the ADM-5800AX Series display

- Turn off your computer or video devices that are the signal source for the ADM-5800AX Series waterproof display and Local Host Transmitter, then the display will automatically turn off.
- If the display is not going to be in use for an extended period of time, disconnect the power supply and power cable from the AC outlet.



Warning! Make sure the ADM-5800AX Series waterproof industrial display is grounded at all times. Also make sure that it is on the same ground as any other equipment connected to its communications ports.

## Adjusting the video quality on the display

After the ADM-5800AX Series display has been turned on for the first time, and if the display is blurry, try to adjust the EQ and Gain rotary knobs to improve cable skew. GAIN rotary knobs are designed for gain control, and EQ rotary knobs are designed for equalizing the wave form of the receiving video signal. It is suggested to begin with adjusting the EQ rotary knob to get the input video displayed first, and then the GAIN rotary knob to fine tune the image/video quality.

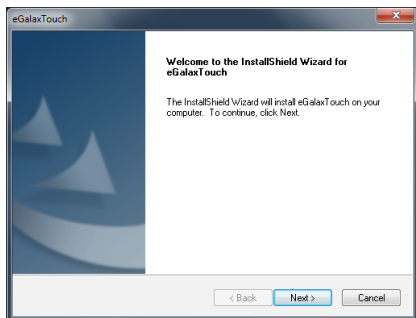
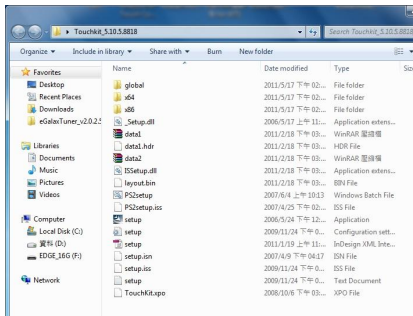
De-skew offers the flexible functionality of allowing skew compensation when VGA (R,G,B) signals weaken due to long range transmissions or through low quality RJ45 LAN cables. Use the (0-7) rotary knob to choose the specific (R,G,B) color channel then use the (+ or -) rotary knob to adjust the skew. There are a total of 31 steps and in each step there is a 2(ns) difference for adjusting the delay between each individual color channel. With this, video quality can be further assured.

# Chapter 4 Settings

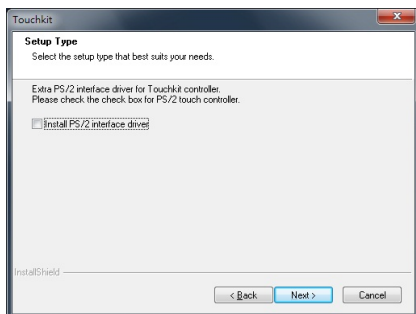
## Installing the eGalaxTouch Utility

Insert the driver CD into your computer and install the eGalax touch driver software by following the steps below.

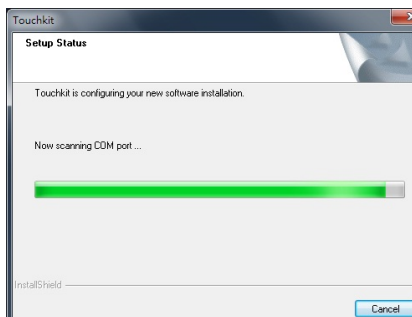
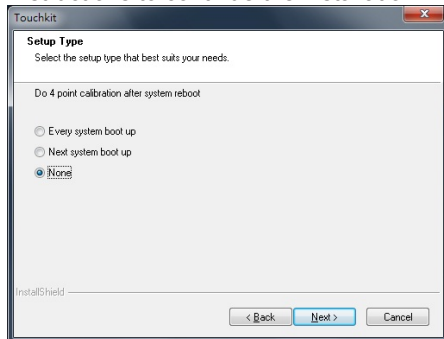
1. Double click “setup” to start the installation of the eGalaxTouch software.



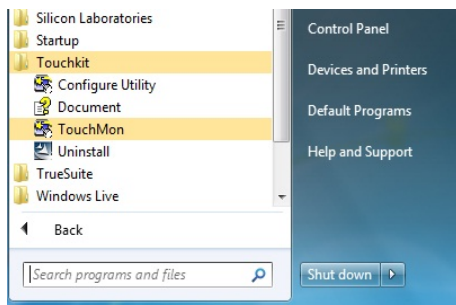
2. Press Next, and a new dialog window will pop up asking if the user wants to install PS/2 touch drivers.



3. Click “next” and follow the on-screen instructions to continue the installation.



4. Finally, restart the computer to finish the installation. A shortcut will be generated and shown on the desktop. A new file group will also be generated for eGalaxTouch.

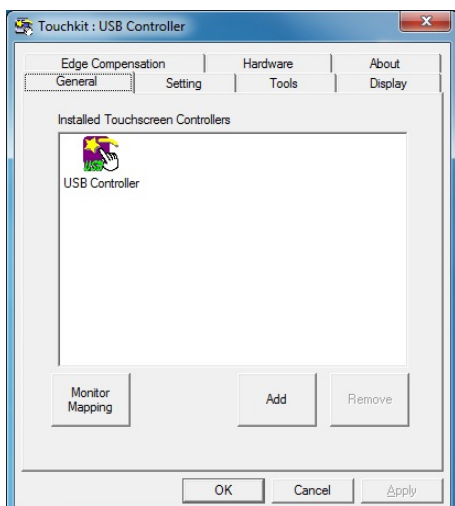


# Using the eGalaxTouch Utility

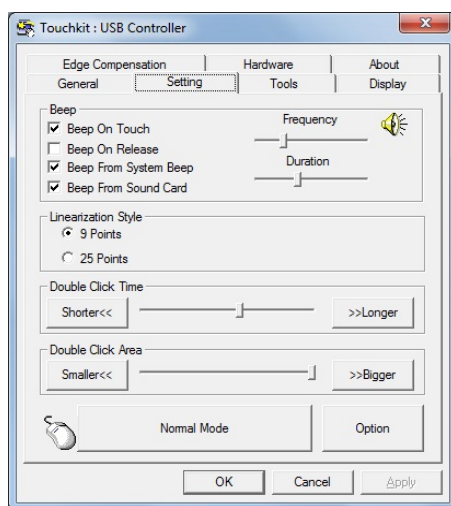
There are seven property tabs in the eGalaxTouch utility window: General, Setting, Tools, Display, Edge Compensation, Hardware and About. Each tab contains different functions for users to adjust to their preferences. Users can easily manage all the eGalaxTouch controller settings through this utility window.

Click on a tab to see its settings. Press "Apply" to confirm settings and press "OK" to save and close the dialog window. Press "Cancel" if no adjustments are needed.

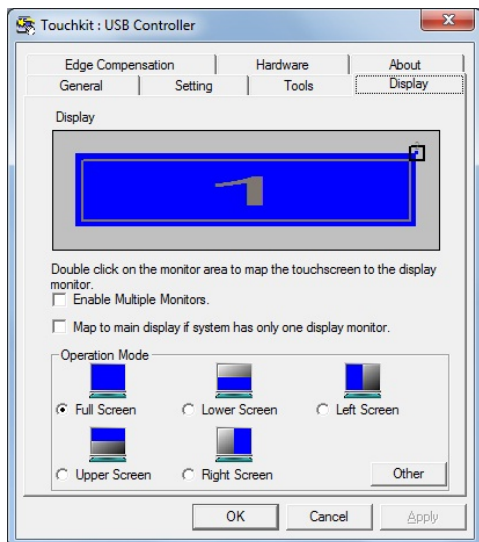
## 1.General Tab



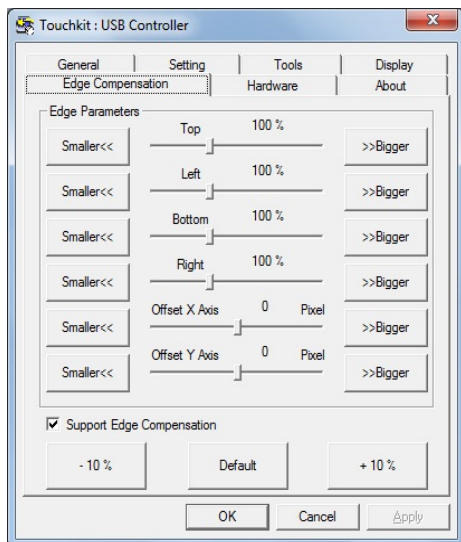
## 2. Setting Tab



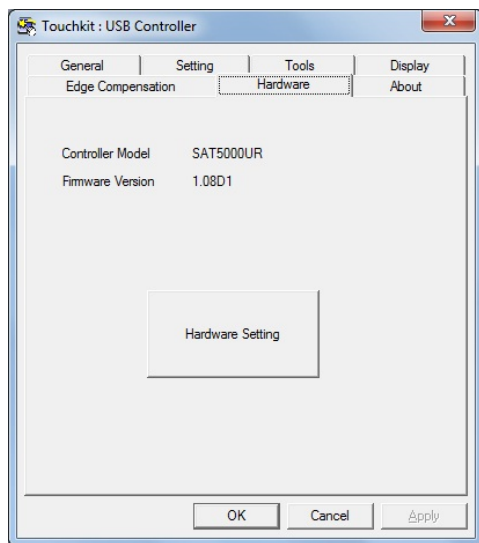
### 3. Display Tab



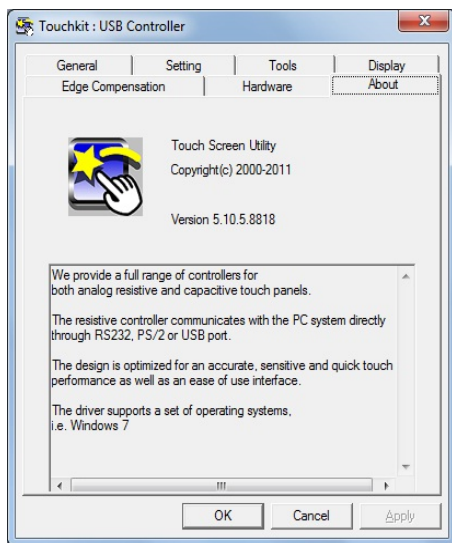
### 4. Edge Compensation Tab



### 5. Hardware Tab



### 6. About Tab



# Chapter 5 Appendix

## Maintenance and troubleshooting

### 1. Maintenance

Regular maintenance of the ADM-5800AX Series industrial waterproof display can help prevent damage or downtime.



**Warning!** Do not operate or service the unit with its chassis open. There are hazardous voltages inside. Service should only be performed by qualified and authorized personnel. Make sure your industrial display is powered down and unplugged before removing the cover or working on internal components.

#### Replacing the Backlights

LCD backlights are rated at the number of hours of operation until they are at half of their original brightness. The ADM-5800AX Series industrial waterproof display backlights are rated at 50,000 hours — that equates to six years of continuous service.

Signs that the backlights may need replacing include:

- 1) The top and/or the bottom of the screen is dim.
- 2) The image on the screen flickers.
- 3) The video appears to be blank in normal light, but can be very faintly seen in strong external light.

**Note:** The backlights are not user serviceable. If the backlights need to be replaced, you must return the unit to Arista for service.

### 2. Troubleshooting

Before calling for service, you can check the following table on symptoms and solutions.

Symptom	Possible Causes	Actions
No LCD display image	- No power - No video signal	- Verify that the Power On LED is lit. - Check to see that the video source is on and operating. Perhaps the source is outputting to a different display.
Half of the image is dark	- Problem with the backlights	- Contact Arista customer support.
LCD image is too bright or too white	- Adjustments - Unrecognizable sync patterns	- Reset to factory defaults. - Verify the supplied video format (XGA or SXGA).
LCD image is not centered	- Adjustments - Unrecognized video format	- Adjust the positioning. - Verify the supplied video format (XGA or SXGA).
Configuration changes not accepted by the display	- Adjustments	- When making adjustments, be sure to “exit out” of the adjustment menus and back up to the main menu level.
Display jitters or flickers	- Adjustments	- Adjust Phase and Frequency for best image.

# 1. Product Limited Warranty

Arista Corporation ADM series LCD display purchased in the U.S. and Canada come with a 3-year limited warranty. The following sections describe the limited warranties and return policies for the North America region.

## 1) Limited Warranty Coverage

- If a product does not work properly because of a defect in materials or workmanship, Arista Corporation will, for the length of a period of three years, starting with the date of the original purchase (invoice date), at its discretion, either repair your product with new or refurbished parts, or replace it with a new or refurbished product.
- The decision to repair or replace will be made by Arista Corporation. During the “Labor” Limited Warranty period, there will be no charge for labor. During the “Parts” Limited Warranty period, there will be no charge for parts.
- The customer pays the freight for shipping the defective products to Arista Corporation. After repairs or replacement, Arista Corporation will ship and pay UPS Ground for the products being shipped back to the customer.
- This Limited Warranty only applies to products purchased and serviced in the North America region. Customers outside of the United States will need to pay the freight for shipping to Arista Corporation and shipping back to the customer after repairs or replacement.

## 2) Limited Warranty Limits and Exclusions

- This Limited Warranty only covers failures due to defects in material or workmanship, and does not cover normal wear and tear, or cosmetic damages .
- The Limited Warranty does not cover damages due to external causes including, but not limited to, failures which are caused by products not supplied by Arista Corporation.
- The Limited Warranty does not cover damages and/or failures which result from negligence, accidents, misuse, abuse, mishandling, misapplication, alteration, faulty installation, set-up adjustment, improper maintenance, power surge, problems with electrical stability, failure to maintain environmental conditions within operating range specified by the manufacturer, relocations or attempts to relocate systems, lightning damage, modification, service by anyone other than authorized service providers, usage not in accordance with product instructions, failure to perform required preventative maintenance, problems caused by use of parts and components not supplied by Arista, and/or adding or altering components without concurrence from Arista Technical Support.
- Any signs showing that the serial numbers have been altered or tampered with will void this warranty.
- There is no expressed warranty except as stated under “Limited Warranty Coverage”. Under no equitable theory shall Arista Corporation be held liable for monetary and/or non-monetary damages resulting from the normal or abnormal usage of our products. Use, distribution and/or similar engagement of our products constitute implied agreement to these and similar Arista Corporation Limited Liability policies.

# 2. Technical Support

## 1) Technical Support Availability

- Arista Corporation is dedicated to your satisfaction. Arista’s Technical Support Team will make every effort to solve the problem over the phone or through e-mail. If we cannot solve the problem over the phone or through e-mail, an RMA number will be issued.
- Information needed when you call: product serial numbers and details of the problem.

## 2) Technical Support Contact Information

- Technical Support Hours: Monday through Friday: 8:30am-5:30pm PST
- Technical Support Phone Number : Phone: (510) 226-1800 ext. 400, Fax: (510) 226-1890
- Technical Support E-mail: [support@goaristaipc.com](mailto:support@goaristaipc.com)

### 3. RMA Procedures

#### Return Material Authorizations

- All returns require an RMA (Return Material Authorization) number. Please contact Arista's customer service representative or complete the RMA request form to obtain an RMA number prior to returning a product(s).
- Returns will be authorized in accordance with the following policy: If it is deemed that the unit/part should be returned, Arista's customer service representative will give the customer a return authorization number and a ship to address to return the product.
- Products will not be accepted by Arista Corporation's RMA department for return if not accompanied by a valid RMA number, which must be clearly marked on the outside of the package.
- Products must be returned within 30 days after the date of when the RMA number was issued. After the 30-day period, the RMA number issued will be invalid. Please do not return products with an invalid RMA number; Contact Arista's customer service representative if your RMA number is invalid.

#### Warranty Returns

- Products to be returned must be within the applicable warranty period. If the warranty period is over, the original product will be returned to the customer.
- The RMA number for Warranty Return will be issued within 24 hours from the time that the RMA application form is received by Arista.

#### Non-Warranty Returns

- If the customer wishes to return a product for repair that is no longer within the warranty period, or for damage not covered by the warranty, an Arista sales representative will inform the customer of the estimated cost of the repair.
- Return of the product will count as the authorization to repair and agreement to pay for the cost of repair, whether or not it exceeds the original estimate.

### 4. RMA Credit Policy

#### Returns for Credit & Credit Types

Returns for credit that require Arista's management approval may take up to 48 hours for processing/approval. Products can be returned for credit with the following conditions:

**Dead on Arrival (DOA):** Customer must report DOA units to Arista's RMA department in 14 calendar days after the product is received. Customer can request either return for credit or replacement. If replacement is requested, Arista will ship the replacement in 7 calendar days and invoice the customer for the replacement. A credit memo will be issued to the customer after the DOA product is received and verified.

**Evaluation Return:** Customer must notify Arista's RMA department before or at the end of the evaluation period if the customer decides to return the evaluation unit. An RMA number must be obtained from Arista prior to returning the unit.

**Short Shipment:** The customer must report for any item received short-shipped or wrong products received in 7 calendar days after the product is received. The customer can request either: shipment of missing items, replacement of wrong items or return for credit. If shipment of missing items or replacement of wrong items is requested, Arista will ship the replacement in 7 calendar days. A credit memo will be issued to the customer after the returned product is received and verified.

**Non-Open-Box Return:** In the event, where a customer places an incorrect order, over stock or double orders. The customer can request return for credit with the following restocking fees applied.

**Restocking Fee:** A 15% restocking fee will apply to non-open-box returns when returned within 3 months after invoice date. A 30% restocking fee will apply to non-open-box returns returned within 6 months. Beyond 6 months after invoice date, a 50% restocking fee will apply to non-open-box returns returned within 12 months. Beyond 12 months after invoice date, Arista will not grant authorization to return non-open-box returns for credit.

**Return Condition:** All valid returns for credit products must be returned in its original packaging and in good condition along with all the items and accessories originally shipped with the product. Any damages will be assessed and the cost of repair or refurbishment will be deducted from the credit issued.

**No Credit DOA:** No credit will be given to the customer for DOA products received by Arista beyond 30 calendar days after the invoice date. No credit will be given to all non-cancellable, non-returnable, custom order parts.



## 5. RMA Transportation Policy

### Transportation Charges

- All customers are responsible for all freight charges involved in shipping the defective products back to Arista Corporation. Arista Corporation will cover the cost of returning products that are under warranty via UPS Ground to customers in the United States after repairs or replacement.
- International customers are responsible for all transportation, insurance, duties and other similar charges for all returned products shipped outside of the United States and must ensure that the product is appropriately packaged. Shipping damages resulting from improper packaging will be the customer's responsibility. there is no response
- Arista is not responsible for products lost during shipment. All products being returned for Limited Warranty repair or replacement must be sent freight prepaid.

### Transportation Damages

- In cases of transportation damage, the customer is responsible for filing any and all claims with the shipping carrier.
- To avoid any potential risk that an RMA product is lost or damaged while in transit to Arista, it is recommended that the customer insures and declares the full value of the RMA product. The customer is 100% responsible for the RMA product while in transit to Arista.
- We urge customers to pack the RMA product carefully to avoid transit damage.

### Refused Shipment Restocking Fees

- If a customer refuses a shipment, credit will be issued after the refused product is received and verified by Arista. The shipping charge plus 15% restocking fees will be billed to the customer.

## 6. RMA Shipping Instruction

### Product Non-Acceptance

- Products will not be accepted by Arista Corporation if not accompanied by a valid RMA number, which must be clearly marked on the outside of the package.
- Any products refused by Arista will incur the fees and/or charges applied by the shipping carrier, and shall be the sole liability of the original shipper.

### Sample RMA Shipping Label

**ARISTA CORPORATION**  
**Attention: RMA Department**  
**40675 Encyclopedia Circle**  
**Fremont, CA 94538**  
**RMA: # \_\_\_\_\_**

### Package Identification

- Each box must reference the following information: Customer/Contact Name · Return Address · Phone Number · RMA Number (issued by an authorized ARISTA source).
- The RMA number must be written on the outside of the shipping container for identification purposes.
- Shipments not properly identified will be refused.
- To avoid any discrepancy of items received, please do not return accessories (manuals, driver CDs, OS CDs, cables, etc.) with the RMA unit in need of repair.
- If available, use the original box/package to ship back RMA units to avoid transit damage.

## **RMA Rejection Policy**

Products will not be accepted by Arista Corporation if not accompanied by a valid RMA number, which must be clearly marked on the outside of the package. Arista reserves the rights to return any RMA product received that does not comply with the information given on the original Return Material Authorization (RMA) request, such as:

- Invalid RMA number
- RMA number not visible and/or not on the box shipping label
- RMA condition described by the customer differs from the actual condition of the product
- Expired RMA number
- Unauthorized return (no RMA # was issued)
- No Arista serial number on the product
- Product is physically damaged

If you have any questions regarding Arista's RMA procedures, product return policies and/or other similar issues, please call Arista's Customer Service and RMA Department during office hours, Monday through Friday (8:30am-5:30pm PST)

- Phone: (510) 226-1800 ext. 400
- Fax: (510) 226-1890
- Email: [RMA@goaristaPC.com](mailto:RMA@goaristaPC.com)

## **7. Arista's Limited Liability**

- Arista Corporation is not liable for incidental or consequential damages resulting from the use of Arista products or arising out of any breach of Arista's full limited warranty.
- Under no equitable theory shall Arista Corporation be held liable for monetary and/or non-monetary damages resulting from the normal or abnormal usage of our products. Use, distribution and/or similar engagement of our products constitute implied agreement to these and similar Arista Corporation Limited Liability policies.
- Arista Corporation is not liable for damages or reimbursement for lost time, lost revenue, cost of having someone remove or re-install an installed unit if applicable, or travel to and from the service providers.
- All expressed and implied warranties, including the limited warranty of Merchantability are limited to the period of the limited warranty, unless, otherwise, indicated in writing by Arista Corporation.

## **Customer Responsibilities**

- By requesting service, the eligible customer acknowledges the terms of the limited warranty, including the disclaimer and limitation of liability provision.
- Prior to seeking service, customers must back-up all data, programs, files and/or similar digital documents that may become damaged and/or lost due to service.
- Arista Corporation, WITHOUT LIMITATION, is not responsible for lost, damaged or otherwise destroyed data due to service.

## **8. Disclaimer**

ARISTA RESERVES THE RIGHT TO CHANGE ANY OF ITS TERMS OF SERVICE, WARRANTY POLICIES, SERVICE PROGRAMS, SERVICE METHODS AND/OR SIMILAR POLICIES AT ANY TIME AND WITHOUT PRIOR OR FORMAL NOTICE TO ITS CUSTOMERS, VENDORS, RESELLERS, END USERS OR SIMILAR.

## Frequently Asked Questions

### **What does 'refresh rate' mean in relation to an LCD display?**

The refresh rate is of much less relevance for LCD displays. LCD displays stay at a stable, flicker-free image at 60Hz. There is no visible difference between 85Hz and 60Hz.

### **Are LCD display Plug-and-Play?**

Yes, the displays are Plug-and-Play compatible with Windows XP, 7 and 8

### **What is a Liquid Crystal Display?**

A Liquid Crystal Display (LCD) is an optical device that is commonly used to display ASCII characters and images on digital items such as watches, calculators, portable game consoles, etc. LCD is the technology used for displays in notebooks and other small computers. Like light-emitting diode and gas-plasma technologies, LCD allows displays to be much thinner than cathode ray tube (CRT) technology. LCD consumes much less power than LED and gas-displays because it works on the principle of blocking light rather than emitting it.

### **What is polarization ?**

Polarization is basically directing light to shine in one direction. Light comes in the form of electromagnetic waves. Electric and magnetic fields oscillate in a direction perpendicular to the propagation of the light beam. The direction of these fields is called the 'polarization direction'. Normal or non-polarized light has fields in several directions; polarized light has a field in only one direction.

### **What kind of wide-angle technology is available? How does it work?**

The TFT LCD panel is an element that controls/displays the inlet of a backlight using the dual-refraction of a liquid crystal. Using the property that the projection of inlet light refracts toward the major axis of the liquid element, it controls the direction of inlet light and displays it. Since the refraction ratio of inlet light on liquid crystal varies with the inlet angle of the light, the viewing angle of a TFT is much narrower than that of a CRT. Usually, the viewing angle refers to the point where the contrast ratio is 10. Many ways to widen the viewing angle are currently being developed and the most common approach is to use a wide viewing angle film, which widens the viewing angle by varying the refraction ratio. IPS (In Plane Switching) or MVA (Multi Vertical Aligned) are also used to give a wider viewing angle.

## Disposal and Recycling Information

Your display must be disposed of properly according to local laws and regulations. Because your remote control contains a battery, it must be disposed of separately from household waste.

When your display reaches the end of its life cycle, contact your local authorities to know about recycling options.



This symbol on the product or in the manual means that your electrical or electric equipment should be disposed at the end of its life-cycle separately from your household waste. There are separate collection systems for recycling in the EU. For more information, please contact your local authorities or your retailer where you purchased the product.

## Disclaimer and Copyright Notice

### Disclaimer

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